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㉚ **Non-human primate CD4 polypeptides and human CD4 molecules capable of being glycosylated.**

㉛ The invention relates to substantially pure non-human primate CD4, and fragments thereof which bind to HIV or SIV gp120. The invention also relates to gp120 binding molecules related to human CD4 but which may exist in glycosylated form.

The invention also relates to fusion proteins which comprise the CD4 molecules of the invention, or fragments thereof, and an immunoglobulin light or heavy chain, wherein the variable region of the light or heavy chain has been replaced with CD4 or fragment thereof which is capable of binding to gp120. The invention also relates to fusion proteins comprising the CD4 molecules of the invention and a cytotoxic polypeptide.

The invention also relates to an immunoglobulin-like molecules comprising the fusion proteins of the invention together with an immunoglobulin light or heavy chain.

The invention also relates to methods of treating HIV or SIV infection comprising administering the CD4 molecules of the invention, glycoproteins, frag-

ments thereof, fusion proteins or immunoglobulin-like molecules of the invention to an animal.

The invention also relates to assays for HIV or SIV comprising contacting a sample suspected of containing HIV or SIV gp120 with the CD4 molecules of the invention, fragments thereof, glycoproteins, immunoglobulin-like molecules, or fusion proteins of the invention, and detecting whether a complex is formed.

The invention also relates to nucleic acid molecules which specify the proteins, glycoproteins and fusion proteins of the invention as well as vectors and transformed hosts.

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EUROPEAN SEARCH REPORT

Application Number

EP 90 11 5877

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Y	CELL, vol. 42, August 1985, pages 93-104; P.J. MADDON et al.: "The isolation and nucleotide sequence of a cDNA encoding the T cell surface protein T4: A new member of the immunoglobulin gene family" * Summary; Introduction; Results; especially figure 6 *	1-30	C 12 N 15/12 C 12 N 15/62 C 12 N 15/13 C 12 P 21/02 C 12 Q 1/70 A 61 K 37/02 G 01 N 33/569
Y	EP-A-0 314 317 (GENENTECH, USA)(03-05-1989) * Page 3, lines 11-38; pages 4,5; claims *	1-30	
Y	WO-A-8 801 304 (THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, US)(25-02-1988) * Summary; pages 16-23; figure 6A; claims *	1-30	
A	NATURE, vol. 331, no. 6151, 7th January 1988, pages 78-81; R.E. HUSSEY et al.: "A soluble CD4 protein selectively inhibits HIV replication and syncytium formation" * The whole document *	1-30	
A	NATURE, vol. 331, no. 6151, 7th January 1988, pages 84-86; A. TRAUNECKER et al.: "Soluble CD4 molecules neutralize human immunodeficiency virus type 1" * The whole document *	1-30	
A	NATURE, vol. 331, no. 6151, 7th January 1988, pages 82-84; K.C. DEEN et al.: "A soluble form of CD4 (T4) protein inhibits AIDS virus infection" * The whole document *	1-30	
A	NATURE, vol. 331, no. 6151, 7th January 1988, pages 76-78; R.A. FISHER et al.: "HIV infection is blocked in vitro by recombinant soluble CD4" * The whole document *	1-30	
The present search report has been drawn up for all claims			
Place of search		Date of completion of search	Examiner
The Hague		02 September 91	NAUCHE S.A.
CATEGORY OF CITED DOCUMENTS			
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